

ELECTROPOLISHING SOLUTION AND METHODS FOR ITS USE AND RECOVERY

Abstract

An electrolyte solution containing an alkylene glycol and a chloride salt is useful for electropolishing metal substrates. An electropolishing method using the electrolyte solution is effective for polishing a varied of metals, including titanium and noble metals. The method avoids the handling and disposal challenges associated with previous methods using etching solutions containing hydrofluoric acid. A method of recycling the spent electrolyte solution is also described.

Figures